Creating a Healthy Future with Brownfields Revitalization

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Introduction to Brownfields and Public Health

This poster presents notable brownfield success stories, data on brownfields site contaminants, and identifies new partnerships and directions to help communities create a healthy future.

A brownfield is a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Since it's inception in 1995, EPA has worked to empower states, tribes, communities, and other stakeholders in environmental protection and economic redevelopment to work together to prevent, assess, safely clean up, and sustainably reuse the more than 450,000 estimated brownfields. Cleaning up and reinvesting in these properties increases local tax bases, facilitates job growth, uses existing infrastructure, takes development pressures off of undeveloped, open land, and both improves and protects the environment and public health.

Brownfields, generally are considered to be sites that pose no or limited health risks to communities. Since the inception of the program, EPA has assessed over 6,000 properties consisting of over 44,000 acres; research has found roughly 30% of sites assessed find no contamination. Of those brownfields sites where contamination was reported in specific categories since 2003, review of contaminants reported through EPA-funded brownfield assessments shows petroleum is the most commonly reported contaminant (78%), followed by lead (62%), volatile organic compounds (49%), other metals (43%) or other contaminants (42%), polycyclic aromatic hydrocarbon (PAHs) (38%), asbestos (28%), PCBs (15%), and controlled substances at 'meth labs' (5%).

However, in addition to environmental contaminants that may or may not be present, brownfields may have broader impacts on public health in the community, including:

- *Safety.* Abandoned and derelict structures, open foundations, or equipment compromised due to deterioration, controlled substance or 'meth lab' sites, or abandoned mine sites may pose safety risks;
- *Social and economic factors.* Blight, crime, reduced social capital or community 'connectedness', reductions in the local government tax base, and private property values that may reduce social services are all social and economic problems sometimes created by brownfields; and,
- *Environmental health.* Potential environmental dangers can be biological, physical, or chemical, and can be the result of real site contamination, groundwater impacts, surface runoff, migration of contaminants, or wastes dumped on vacant sites.

A New Health Emphasis

Passage and signing of the *Small Business Liability Relief and Brownfields Redevelopment Act* or Brownfields Law, expanded EPA Brownfields program funding levels and eligibility for brownfields assessment and cleanup support and sites eligible for funding. It provides new focus on the impacts of brownfields, particularly in disadvantaged communities and among sensitive populations. One facet of this public health focus was the introduction of language that provides for local government recipients of brownfield grants to use up to 10% of grant funds for

" (i) monitoring the health of populations exposed to one or more hazardous substances from a brownfield site".

Since passage of the Brownfields law, EPA has worked with states, tribes and local stakeholders to consider health as part of brownfields program efforts. We have worked in partnership with the Environmental Law Institute (ELI) to raise community awareness about public health as part of the brownfield assessment, cleanup and redevelopment process and involve local communities in the brownfield redevelopment process to improve public health. In discussions in brownfields communities in Florida, Massachusetts, and New Jersey and with a broader public health audience, ELI has worked with communities to consider brownfields issues within a broader public health context in disadvantaged communities by addressing brownfields issues that pertain to health but also strengthened the ability of local communities to consider brownfield redevelopment as an opportunity to increase health care access and locate health facilities on redeveloped brownfield sites.

The EPA Brownfields office is now embarking on new partnerships with ATSDR, CDC and local, state, tribal and national health and environmental stakeholders to improve the capacity of health agencies to participate in brownfields assessment and cleanup activities but also to consider the opportunities brownfields redevelopment provides to improve public health. We now have examples of communities creating new opportunities to improve public health, including improving health care access using brownfield redevelopment. In Clearwater Florida, the Johnnie Ruth Clarke/Mercy Hospital now serves as a federally qualified health center that provides primary health to the North Greenwood neighborhood, a medically underserved minority community. In Somerville, Massachusetts, a former mattress factory is now home to the Visiting Nurses Association 97 unit assisted-living facility.

As we tackle today's environmental and health challenges and how the built environment may need to change as our society changes, we look to collaborations between environment, health and planning professions and visionary leaders in the public and private sectors to find new solutions. Brownfields redevelopment provides many opportunities, some answers and new avenues to create community wealth and community health.

For more information about EPA's Brownfields program and our partnerships to improve public health, please see:
http://www.epa.gov/brownfields/

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